

ABSTRACT OF THE DISCLOSURE

[0036] A novel mobile unit which communicates with a new and advantageous base station. The mobile unit includes a system for generation of position information and
5 a transceiver for transmitting the position information. In the preferred embodiment, the transceiver is a CDMA system and the system for generating position information includes an arrangement for receiving a GPS signal. In the preferred embodiment, a GPS assisted arrangement is employed which is adapted to receive a signal from an airborne platform as well as from a satellite based platform. The inventive base
10 station is adapted to receive position information from a remote unit and provide a received position signal in response thereto. The novel base station is further equipped with a mechanism for directing a beam in response to the received position signal. In the illustrative embodiment, the mechanism for directing the beam is a smart antenna system including an antenna array and a beamforming network for driving the array to
15 output the directed beam.

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